

with abundant bog asphodel interposed with rock outcrops bearing thrift and English stonecrop.

Eventually the sun broke through and I was rewarded by finding Meadow Brown and Ringlet, the latter a new 10 km record, both in small numbers. After diligently searching all the marsh thistle heads I located two Large Skippers, my first in Scotland, and another new 10 km record. Common Blues were the most abundant species on the wing. Surprisingly there were no Green-veined Whites about, so I guess I my visit coincided with the dip between broods.

There was no chance to record as I drove south towards Portpatrick as it became completely overcast again. Another bright spell tempted me along the cliffs towards Dunskey Castle and back via the old railway line. This yielded Grayling and a single Dark-green Fritillary, as well as more Meadow Browns and Common Blues in the calcareous rich clifftop grassland. At the castle I chased what looked like a Northern Brown Argus over the cliff and failed to find another. However I have since learnt that this is a well known spot for this species.

Having decided to visit the Mull of Galloway before heading home I was distracted by a road sign for Kirkmadrine. A double tree line, no more than a couple of hundred yards long, leads to this small chapel which has a display of early Christian stones. On my way back to the car I was delighted to see a my first Scottish Speckled Wood flying up and down the avenue. Having subsequently seen Speckled Wood in several parts of Argyll, and knowing this species to be quite common on the west coast the significance of this sighting did not register until I recently consulted the 1984 Atlas. Barring introduction, and this location seems a most unlikely spot for an introduction, this record would appear to be the first recent record for Galloway. Judging by the current known distribution of Speckled Wood this individual would as likely be of Irish origin rather than from the nearest Scottish site, Arran. There appear to be plenty of suitable sites in the Rhinns that could support this species and they would be well worth exploring next summer.

Cloud prevailed and I saw no butterflies on the drive to the Mull. After a brief chat with the warden I went to see the small breeding auk colony on the RSPB reserve and had only walked about 50 yards when I was passed twice by a ground hugging Dark-green Fritillary. A single Meadow Brown completed the days tally. The Rhinns of Galloway is an area that would repay exploration in good weather.— P.K. KINNEAR, 20 East Queen Street, Newport-on-Tay, Fife DD6 8AY.

Diapause can occur in *Pieris brassicae* L. ssp. *cheiranthi* Hb. (Lep.: Pieridae)

There has recently been published a very worthy successor to the well-known "Higgins & Riley" *Field Guide to the Butterflies of Britain & Europe* with the same title but the author is Tom Tolman and the new illustrations are by Richard Lewington. In my view the typographical layout and illustrations are a great improvement on the earlier work and this makes the book easier to use. I would have liked the distribution maps to have been to a larger size but then space is always at a premium and this has allowed more room to add a bit about the life-history. I would, however, like to take issue with, and correct, Tom's statement on page 35 under

Pieris cheiranthi that "In captive rearing, attempts to induce diapause by reduction of photo-period have been unsuccessful." Not so, for both I and others have induced diapause in this subspecies. Some thirty years ago I was breeding *cheiranthi* as well as the nominate *brassicae* in continuous culture and in some quantity. It was in fact found necessary, since the culture was being reared all the year round, to maintain an 18/6 hour light/dark period in order to prevent them going into diapause and in addition it was always my practice in order to insure against the loss of the culture through accident and/or disease to keep a reserve stock in diapause. That this was no accident as regards *cheiranthi* was proved only recently when I attended the Christmas Entomological Fair in Kettering and found diapause *cheiranthi* chrysalids on offer which had been bred by Nigel South, an experienced entomologist. As to the conditions required to induce diapause it is important to bear in mind that photoperiod induction can be over-ridden by temperature and even with the nominate *brassicae* it is important to keep this at autumn rather than summer temperatures, a point which I think is often overlooked. My *cheiranthi* were in fact reared at a temperature of 15-25°C. It was also my experience than when nominate *brassicae* were reared at 25-30°C then whatever the light regimen it was virtually impossible to induce diapause.

Whether or not *cheiranthi* should be regarded as a distinct species appears to be a matter of personal opinion guided by the changing views of taxonomists. My view is that as it freely hybridises with the nominate *brassicae* and the offspring are fertile unto the umpteenth generation, then its designation as a subspecies is the correct one – a view recently supported by Karsholt & Razowski (1997. *The Lepidoptera of Europe: a distributional checklist*).– BRIAN O.C. GARDINER, 2, Highfield Avenue, Cambridge CB4 2AL.

***Palpita unionalis* Hb. (Lep.: Pyralidae) and other migrants from Devon**

In view of 1997 having been such a poor year for migrating Lepidoptera, it seems worth placing on record an occurrence of the above species at my garden m.v. trap on the morning of 28.ix.1997. The trap itself contained a motley selection of insects: numerous caddis flies, mosquitoes, a few drowsy wasps, a far more alert hornet, several shield bugs, sundry *Aphodius* and other beetles and a few common moths including some rather battered Large Yellow Underwing *Noctua pronuba* L. and Black Rustic *Aporophyla nigra* Haw. I almost overlooked the *unionalis* which was outside the trap, resting on an overhead rafter.

The only other migrants to have appeared at my light this year are Silver Y *Autographa gamma* L. in small numbers from May onwards, a single Dark Swordgrass *Agrotis ipsilon* Hufnagel and Delicate *Mythimna vitellina* Hübner on 30.ix.1997. This is the first year for as long as I can remember when I have not seen a Humming-bird Hawk-moth *Macroglossum stellatarum* L. in Devon and in stark contrast to 1996 I have seen just one Painted Lady *Cynthia cardui* L.– ROBERT BOGUE, Tamar View, Tuckermarsh, Bere Alston, Devon PL20 7HB.